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ABSTRACT

This monograph is a follow-up to a comprehensive study of education for employment that examined how successfully individuals were being prepared for employment by vocational education, career education, and adult education. Three goals surfaced from the study: enhancing quality, increasing effectiveness, and assuring access to vocational education for youth and adults. Of these goals, the issue of access is less often the focus of attention. The purpose of this monograph is to generate a clearer understanding of the issue of access as it relates to vocational education. The authors of the four sections present the following viewpoints on access to vocational education: "Knowledge, Programs, and Equity" (John Washburn); "A Community College Perspective" (Larry Johansen); "A Guidance Counselor's Perspective" (Kathy Dingler); and "A Local Administrator's Perspective" (Joel Schneider). Each section includes a summary and references. The third section also includes an appendix listing 15 research statements regarding the involvement of guidance. (NLA)

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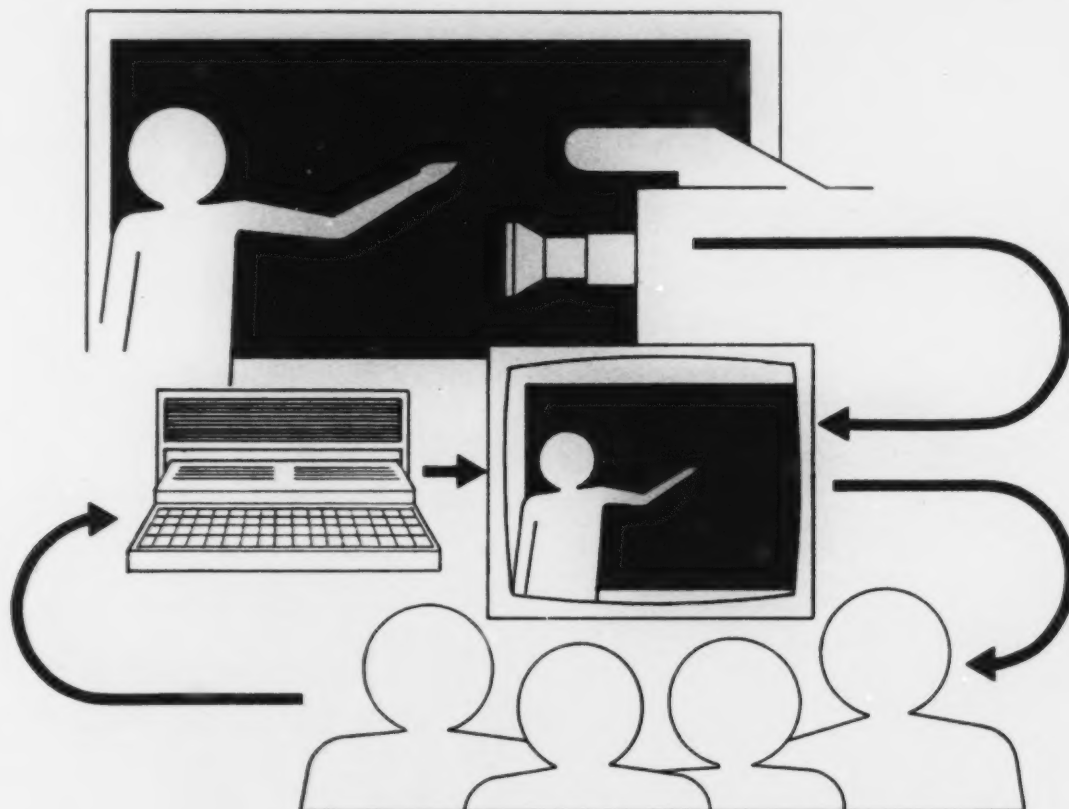
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**Vocational
Education: The
Issue Is Access**

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**A Product of the
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and Vocational
Education**

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Foreword

The 1982-83 school year opened a period of tremendous change for education for employment programs in Illinois. During that school year, the Illinois State Board of Education conducted a comprehensive study of education for employment. The study examined how successfully individuals were being prepared for employment by the diverse programs of vocational education, employment and training, career education and adult education (Illinois State Board of Education, 1987).

Although this study affected vocational education in many ways, three goals surfaced for state and local educators. These goals were to:

- *increase the effectiveness of vocational education,*
- *enhance the quality of vocational education,*
- *assure access to vocational education for youth and adults.*

Each of these goals represents foundational keystones to strengthening vocational education in Illinois. However, of the three goals, problems relating to access seem to be the most cumbersome to vocational education practitioners. Of these three goals, the issue of access is less often the focus of attention from practitioners, administrators and university researchers. Is it the least important of the three goals of the education for employment initiative, or merely the **least understood**? What elements comprise the issue of access and how are these elements perceived by vocational educators?

The Department of Adult, Vocational and Technical Education is currently funding a project titled Change, Technology and Vocational Education. Housed at the Northern Illinois University Office for Vocational, Technical and Career Education, the project is intended to examine new methods and technologies for meeting the three goals of quality, efficiency and access. To help achieve objectives of this project, the directors believed a clearer understanding of the issue of access was in order. Furthermore, the understanding needed to be shared with vocational education teachers and administrators across the state.

This monograph was created to generate a clearer understanding of the issue of access as it relates to vocational education. The chapter authors present viewpoints from distinctly unique frames of reference. Chapter One provides an overview of the issue of access. Dr. Washburn, currently Chair of the Department of Vocational Education Studies, Southern Illinois University, wrote this chapter based on his experiences as one of the original architects of the education for employment initiative in Illinois. Dr. Washburn paints a broad brushed landscape of access to vocational education from the perspectives of **knowledge, programs and equity**.

Chapter Two was authored by Kathy Dingler, Director of Guidance, Crete-Monee High School, Crete, Illinois. This past academic year Ms. Dingler chaired a committee responsible for drafting a 'why' position paper to justify vocational education in the Crete-Monee Consolidated Unit School District. Ms. Dingler's chapter adds a valuable perspective to this monograph--the issue of access to vocational education from the vantage point of a practicing guidance counselor.

Larry Johansen, Associate Vice President, Kishwaukee Community College, Malta, Illinois, authored Chapter Three. Mr. Johansen has been very active in the articulation efforts of the Kishwaukee Education Consortium (education for employment). Mr. Johansen examines the issue of access from the perspective of a community college administrator.

Joel Scheider authored the concluding chapter of this monograph. Joel served for several years as the planning grant director of the Stephenson Area Vocational Technical Education System, Freeport, Illinois. Mr. Scheider's chapter portrays the issue of access to vocational education from the viewpoint of a director of an education for employment system.

The collective perspectives of these authors should bring to the readers of this monograph a clearer understanding of the issue of access as it relates to the improvement of vocational education. Understanding the elements that comprise this issue will help all of us seek to eliminate the barriers to access that confront current and potential vocational education students.

Gene L. Roth

Access to Vocational Education: Knowledge, Programs and Equity

by John S. Washburn

Introduction

A serious discussion on the importance of vocational education for youth and adults must focus on several issues. These issues include: the importance of providing a high-quality program; the need to deliver a program which is delivered efficiently; and, the support for a program which is readily accessible to youth and adults. While these issues—quality, efficiency, and access—are important, this paper addresses the issue of 'accessibility' to vocational education.

Any inquiry regarding the issue of access in vocational education must be viewed from varying perspectives. To what extent does vocational education inhibit students (particularly at the high school level) from access to more general knowledge such as mathematics and science? To what extent do students have access to a broad array of vocational

programs and services? To what extent is access and equity for special populations emphasized in current discussions regarding vocational education?

Challenges associated with the issue of access in vocational education are two-fold. First, some issues are systemic in nature and can best be addressed by restructuring the vocational education delivery system. In Illinois, that restructuring was initiated with the approval by the State Board of Education of a new Education for Employment policy statement and administrative plan (State Board of Education, 1987). Second, other challenges are related to the redesign of vocational programs, which will appeal to a wider range of students. These challenges, which set the framework for this paper, are described in the discussion of issues related to access to knowledge, access to vocational programs and services, and access and equity for special populations.

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Access to Knowledge

Taken together, the number of current educational reforms indicate that alternative and remedial systems of education are losing ground to more traditional content and methods. The predominance of educational reform proposals suggest the high school curriculum should focus more on basic academic subjects, e.g., mathematics, English, science. At the same time, there have been substantial changes in the academic requirements necessary for admission into many state universities. Consequently, many high schools have modified their graduation requirements to accommodate new admission requirements for students entering a college or university.

In many higher education reform proposals, vocational education is not identified as a requirement for admission to a college or university.

In many higher education reform proposals, vocational education is not identified as a requirement for admission to a college or university. This practice limits the amount of time in the school day students have available to participate in elective subjects such as vocational education. As a result, vocational education suffers (by implication) from a popular notion that it interferes with or is not as important as learning the basics.

Opponents of vocational education suggest a liberal education will provide high school students with more appropriate experiences for their future. Lakebrink (1986) notes:

Vocational Education today often tracks large numbers of low income, minority, and female students into dead-end employment. If we continue to waste this resource, our work force will suffer and so will the general welfare of our society. (p. 36)

Lakebrink (1986) argues that a good liberal education will provide students with a solid foundation for future social and work pursuits. She suggests that equitable access to education means assuring that students are not prevented from developing their talents. Lakebrink's notion is that any school program that does not provide a good liberal educa-

tion has the effect of limiting students' future pursuits. Jeannie Onkes (1986) offers similar concerns when she notes:

The events and assumptions that led educators to split the secondary school curriculum into 'academic' and 'vocational' are at the root of today's schooling troubles. The track curriculum of secondary schools has had disappointing effects; and, as long as this split is maintained vocational educators will be consigned to act out the belief that some children, often the poor and minority, are unable to learn the things most valued by schools and society. (p. 32-33)

Other authors take a similar view regarding the role of the secondary school in preparing youth and adults for work. In the book titled The Next American Frontier, Robert Reich (1983) notes we have the potential of causing serious economic problems of the "best and brightest" students avoiding jobs in such fields as medicine, law, and finance for short term economic rewards.

Such views become more complex when one considers that vocational education, as it is currently described, is not one unified program. Campbell, Orth, and Seitz (1981) identified several patterns of participation for students enrolled in high school vocational education courses. They noted that participation could be categorized according to: the Carnegie units of credit students earn, the intensity of the specialization, the timing of coursework, and the continuity of course taking. They suggest that decisions about the relative importance of academic and vocational subjects in the curriculum of high schools must be tempered by the notion that students enroll in school with markedly different attitudes about school, work, and their futures.

Other authors take a proponent view to vocational education in the secondary schools, however, they suggest the need for substantial modification in the vocational program as we now know it. Silverman (1986) suggests that:

Although future crises may raise the status of secondary vocational education, those of us who believe in its value prefer a more active stance. To improve its status now, we can redesign the program to appeal to a wider range of students, actively recruit its teachers from a broader pipeline of talented persons, raise the quality of the learning experiences,

and improve its management. (p. 7)

Perhaps the most persuasive argument for establishing vocational education's role in the secondary school comes from Jeannie Oakes (1986) when she suggests:

An approach to vocational education would establish a new philosophical base that would probably assert a moral rather than a technological view of education...individual differences are not appropriately translated into school practice that implies 'headedness' for some, 'handedness' for others. This results in as great a disservice to the 'heads' as it does to the 'hands'. All students can benefit from a balanced curriculum...in a real experience that a reconstructed vocational education will bring to schools. (p. 35)

While Oakes describes a radical change for vocational education, those changes may grow out of challenges associated with changing skill requirements for various occupations.

How is it that schools can provide good basic, technical and attitudinal skills for students who enroll in vocational education and at the same time engender in students appropriate interests of an academic and vocational nature? The assumption is made herein that the question of access to vocational education is intertwined with questions of purpose. What do we expect students to know and be able to do as a result of their learning?

The need for access to a short-term program in welding may be quite different for a high school senior and a displaced worker.

The need for access to a short-term program in welding may be quite different for a high school senior and a displaced worker. Ivan Charmer (1987) of the National Institute for Work and Learning suggests that the process for preparing people for work is quite different for different groups of workers. In particular, he notes the processes for preparing entry level workers are unique and different than those for preparing mid-career and older workers. Just as youth have markedly different attitudes about school, work and their futures, so do adults.

Some students identify with careers as early as the ninth grade. Some adults may wait until later in life

to select a different career path. Some youth are ready to take courses that will help them achieve well-defined career goals; others are not. Similarly, some adults are ready to take intensive coursework to prepare them for a new or changing career; others have more intrinsic interests in their schooling.

Any discussion of the diverse populations—and their unique expectations—must be tempered with the recognition that technology and changing demographics will impact on the types of programs provided for different workers. Charmer (1987) suggests:

Technology does not, by itself, decrease, or increase skills; cause mismatches; or eliminate or create jobs. While technology may set limits or open possibilities, it is the managers and decision makers that ultimately are responsible for determining options for workers. In other words, new technologies sometimes compel, but more often permit, industries and organizations to reorganize and restructure jobs. New technologies may often displace existing work tasks and at the same time create new work tasks. (p. 161)

The November 1984 *Monthly Labor Review* indicates that of the ten fastest growing occupations, there are seven that are directly related to new technologies, e.g., data processing, electronics. The 'content' of these new technologies will affect what knowledge people must possess. In large measure, continued student participation in traditional vocational offerings will have dilatory consequences on students' futures—unless, they have access to the content of these new technologies.

Changes in skill requirements for jobs must be also viewed in the context of significant demographic shifts in the work force. *The Work Force 2000: Executive Summary* (1987) notes that:

The work force will grow slowly, becoming older, more female and more disadvantaged. Only 15% of the new entrants to the labor force over the next 13 years will be native white males, compared to 47% in that category today. (p. 1)

What do the changes in skill requirements and demographics mean in the context of access to vocational programming? First, youth will need to learn the content of technology in ways that may be radically different from what now exists in order to compete in the workforce. Second, the number of young

people in vocational education will continue to include a high proportion of young people from poor families, who have a low academic ability, who have a low grade point average. These are the same characteristics of those groups that we can expect will be entering the labor force in the future. Campbell (1986) notes:

While poverty existed before the students entered the vocational curriculum; the grades were already lower than when they began the vocational coursework; and ability, although not fixed, is relatively stable through the high school years. (p. 10)

Access to vocational education must continue to focus on students at all ability levels and should be no less important for the talented student than for those with less ability.

The notion that people should not be prepared for low-skilled, low-wage jobs is simply inappropriate and suggests a rather elitist view of the work force.

The Task Force on Education for Economic Growth (1983) from the Education Commission of the States noted:

Technological change and global competition make it imperative to equip students in public schools with skills that go beyond the basics. For productive participation in this society, that depends evermore heavily on technology, students will need more than the minimum competence in reading, writing, mathematics, science, reasoning, the use of computers, and other areas. (p. 9)

Burke and Rumberger (1987) note "that despite the popularity of these beliefs, there is little concrete evidence to support them." (p. 75) They concede that new jobs will be created for workers who design and build these new sophisticated devices. However, recent employment projections indicate that relatively few new jobs will be created in firms where these devices are built, or in occupations related to their use. Rather, future job growth will continue to be dominated by retail trade and service employment where there is a higher concentration of low-skill, low-wage jobs than in other sectors of the economy. (p. 75)

These notions suggest the need to review the types of occupations currently emphasized in the vocational classroom, particularly at the high school level. What occupations will prepare high school students for immediate employment and a future with promise? Vocational education programming in the service, marketing, and health areas appear to be promising—as well as programs that emphasize learning transferable skills, e.g., decision-making, problem solving, which go beyond those of a technical nature.

One might question any proposal which suggests preparing some young people for low skill, low-wage jobs. However, Tsang (1984) notes that a growing imbalance between the educational level of workers and skill requirements of their jobs could explain some of the recent slowdown in productivity growth in the United States. Evidence suggests that workers with a higher educational level than required for their jobs often become dissatisfied and are less productive.

The notion that people should not be prepared for low-skilled, low-wage jobs is simply inappropriate and suggests a rather elitist view of the work force. This is not to negate the importance of rethinking the mission of vocational education and the unique needs of entry level, mid-career and older workers. For the latter groups, it will be important to discover new methods for adult learning, particularly those which affect situational (time, age), social (interest, friends), and structural (inadequate counseling, financial support) factors. It will also be important to rethink the mission of vocational education for young people whose interests may or may not be best served by focusing on preparation for one specific career.

Access to the Delivery System for Vocational Education

The vocational education delivery system in Illinois has suffered from several unique problems. The Illinois State Board of Education (1983) notes: rather than addressing either labor market demand or changes in the work force, vocational education programs are offered in traditional patterns and are

offered as a consequence of assumptions about student interest and teacher and equipment availability. (p. 13)

Opponents of vocational education claim the vocational programs are not well matched to the labor market. Clearly, some are not. However, Campbell (1986) notes that data (from the National Longitudinal Survey of Labor Market Experience and the High School and Beyond Survey) ...demonstrates that vocational education in the high school is serving an important function, both for society and individuals. It is not ideal, nor is it a path to low paying jobs... (p. 14)

This is not to say that there are not problems which vocational educators must address. To the contrary, a basic restructuring of delivery systems and rethinking of the mission is warranted.

Inconsistencies in the match between program offerings which provide substantial advantage for employment and student interest (e.g., marketing, health) and lack of adequate staff and equipment, does not allow vocational education to place priority on demands of the labor market. As an illustration, enrollments through 1987 in Illinois remained relatively low in occupations preparing students for professions in allied health fields. However, demand for workers in this occupational area in the next decade will increase substantially.

The greater the capital outlay required for equipment, the more difficult it is to find staff and the less likely that the program administrator will be able to begin a new program—even if labor market conditions show prospects for employment in highly paid occupations. As a result, many high schools have continued to offer programs with existing staff, facilities and equipment. Some of these programs are of high-quality; others are not. The school may simply not have the student population or financial ability to support a high-quality program. The result: students may not have access to vocational education programs which are well matched to the labor market or of high quality.

At the community college level, program diversity would seem to occur more often. However, Woods and Honey (1981) note that problems associated with vocational education are not peculiar to the high schools. In some programs, post-secondary vocational graduates do no better than those of transfer programs. Some programs are well-matched to the labor market; others are not. The more tradition-

al programs are often those which do not enhance occupational versatility and transferable skills.

Another challenge to assuring student access to vocational programming relates to unnecessary duplication of effort among vocational education providers. Duplication of effort does not necessarily allow for ready program accessibility to all youth and adults.

Enrollments may be clustered in a limited number of program areas. Other courses may have unacceptably low levels of enrollments. Costs of these programs vary substantially. The effect was summarized by the State Board of Education (1983) when it noted:

The combination of high cost for some courses and low enrollments in other courses reduces the ability of each school to support a comprehensive program (p. 15).

The result: diminished access to vocational programming for students.

These issues become more complex when one views the vocational education program in its broad context.

Vocational education is predicated on the notion that students should have the opportunity to prepare for work when and where they need it, not when it is most convenient for schools to provide it. Across the country, vocational education programs can be found in comprehensive high schools, vocational high schools, area vocational centers, community colleges, technical institutes, four-year institutions offering two-year programs and skill centers. Access to vocational education is made more complex by a variety of program deliverers, delivery strategies and systems and public institutions which prepare people for work.

Vocational education is offered not as a result of the diversity of the vocational education courses (e.g., technical, agricultural, home economics) but from its focus on the array of student expectations from their vocational education experience. During the primary grades, experiences focus on awareness and understanding of work. Later, schools may emphasize technical or orientation courses. For some students, the same courses may be preparatory to community college or proprietary school training.

To structure the vocational education curriculum such that it limits student flexibility is as inappropriate as suggesting that increasing academic intensity is appropriate for all students. Students must

not only have access to academic and vocational programs, but access to a diverse offering within each program.

This notion of broadening the school program rather than focusing on it was identified by members of the William T. Grant Foundation Commission on Work, Family and Citizenship (1988). They said:

The Commission has serious reservations about such a blanket [educational] policy when applied to youth who learn in many different ways and who are already overly cloistered in school. More classwork, more uniformly taught and more bureaucratically controlled may not be the best solution for all students. It is most definitely not the best solution for many. (p. 40)

The Commission goes on to recommend access to an expanded number of options in three areas: education, service, and paid employment as the best routes to preparing students for continuing education and/or immediate employment.

Several states have established initiatives to restructure the vocational education delivery system to increase student access to vocational programming.

Several states have established initiatives to restructure the vocational education delivery system to increase student access to vocational programming. California, Kansas, Michigan, and Pennsylvania are among those states. In Illinois, the State Board of Education (1987) focused on the question of access in its study on education for employment. The State Board said:

Access will be assured if youth and adults can participate in programs that have previously been unavailable to them. By sharing instructors and facilities, the regional systems and community colleges are able to offer new programs and improve others. (p. 6)

Clearly, the State Board of Education recognized the importance of providing programs which are accessible in an array of locations to the state's youth and adults.

From this discussion, access to the delivery system for vocational education suggests two important considerations:

- *Increased access to vocational programming must encompass more than the notion of expanding access to more courses which are inattentive to the labor market;*
- *Diminished access may be the result of schools offering more than they are capable of providing given their size, wealth, and geographic location.*

Thoughtful consideration and attention to these considerations are critical to restructuring the vocational education delivery system.

Access and Equity for Special Populations

A study by Schmidt et al. (1987) identified the relationships of 'access and equity' as key topics for vocational education research and development. These issues have surfaced in other contexts, most notably the work of the National Commission on Secondary Vocational Education. In The Unfinished Agenda (1984), the Commission noted that many of the questions related to access to vocational programming focus on the needs of special populations. In this publication, Commission members challenge vocational educators to identify policies which effectively minimize bias and stereotypes—the same policies which may influence a student's choice or access to programming.

The William T. Grant Foundation Commission on Work, Family, and Citizenship is more pronounced in its concern for equal access to education and training. In the report titled The Forgotten Half: Non-College Youth in America (1988), the Commission notes:

Data reviewed by the Commission lead us to conclude that there is a persuasive argument to expand education and training opportunities for all non-college-bound youth. An even more compelling case can be made for the potential value of recurrent education to low-income youth, the subset of the non-college population that suffers the most prolonged and severe unemployment and underemployment. (p. 69)

Commission members noted the importance of providing education and training options for an

array of special populations, especially in the area of adult learning. They suggest that resources which might be made available to serve these populations are 'overwhelmingly' channeled to programs which serve individuals seeking a college degree and that "low-income youth in particular, and non-college-bound youth, in general, will continue to suffer by comparison with our best educated young." (p. 70)

The consequences of diminished access and the shift in school policy to one of rigorous learning of 'academic' subjects suggests important consequences for the schools. The common school is the heart of democratic schooling— schooling that all students deserve regardless of race, class, gender or presentation. This type of schooling provides access to what Dewey called the 'funded knowledge of civilization' (Oakes, 1986).

***The high school should take
advantage of the balance of diversity
of academic and vocational subjects.***

There will be a diminishing number of young people and a substantial shift in the nature of the work force with the work force becoming older, more female, and more disadvantaged (Workforce 2000, 1986). Problems associated with special populations must be considered in any discussion concerned with the importance of access to vocational education.

As an illustration, high unemployment rates among black and hispanic youth suggest that vocational education should be provided to prepare them for entrance into the labor market. There should be no shame in preparing a disadvantaged, poor child simply because school policy-makers suggest that high schools should not have a diversity of purpose. Concurrently, vocational education should aim to attract a wider range of students— including those who have special talents, interest and abilities which could be appropriately served in vocational programs.

Unfortunately, enrolling in a vocational education program may carry with it a stigma which results in an artificial separation of youth and adults who stray from college preparatory learning. Unconsciously, students may be channeled into a particular sequence of courses because of the myth that the handicapped child will not benefit from a strong basic

curriculum or the gifted child will not benefit by an experience in the vocational curriculum.

Notions of inequality in the curriculum are noted by Oakes (1986) when she says:

The concept of self-fulfilling prophecy— long established for individuals— can be seen to work institutionally. Schools send a message that some children are gifted, bright, and academic and that others are average, slow, or vocational. Few students and teachers can defy the expectations. (p. 34)

The consequences of diminished access for all students, and particularly those with special needs, have been suggested by Campbell (1986), Silverman (1986), Oakes (1986) and others. These can be paraphrased as follows: Without access to a broad curricular offering, we may witness higher high school attrition rates with students who are disenchanted with their schooling experience and choose to leave the high school before graduation.

Access to vocational education for all students carries with it a broader responsibility to address individual interests, abilities and aptitudes. The high school should take advantage of the balance of diversity of academic and vocational subjects. Narrowing the range of course offerings would seem to have an accelerating consequence for drop-out prone youth. The American Vocational Association (1988) suggests that increased core requirements tend to standardize instructional methodologies, discouraging some students who learn better through a more applied approach. One of the most powerful themes for supporting a need for access to vocational education in the high school curriculum comes not from the diversity of vocational education courses, but from its focus on the array of experiences it provides to students with differing interests.

Summary

A realistic view of issues related to access in vocational education must include discussion of access to knowledge, access to vocational programs and services, and access and equity for special populations.

Inquiry regarding access to knowledge suggests the need for a serious focus on the redesign of vocational education programs to appeal to a wider range of students. Access to vocational programming is as

important for the entry level worker as it is for the worker making a mid-career change or the older worker. However, the mission and purposes of vocational programs for each may be quite different.

Some of the challenges associated with access to the delivery system for vocational education are systemic in nature. They are challenges associated with the need for attention to labor market conditions and student interests. A high-quality program is characterized by use of state-of-the-art equipment, an en-

thusiastic teaching staff, and an up-to-date curriculum which emphasizes occupational versatility and transferable skills.

The focus on providing access to vocational programming for special populations must be twofold: on program redesign and organizational restructuring. Students, whether youth or adult, black or white, disabled or not, can benefit from programs which focus on a successful transition from school to work.

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Access to Vocational Education: A Community College Perspective

by Larry Johansen

The Community College System has contributed greatly to the education and training of the citizens of Illinois. Community colleges allow individuals to achieve mobility and advancement through increased levels of skills and knowledge. Much of this contribution has been made in the area of vocational education for students entering a field for the first time or adults seeking retraining or updating of current skills. Many, however, are still unable to take advantage of such opportunities due to hindrances caused by lack of resources, insufficient preparation, incomplete guidance and advisement, or inconvenient logistics. Community colleges face increasing challenges in overcoming these barriers to access.

No other educational institutions have the challenges afforded community colleges. Their graduates do not leave—they return again and again. They are not restricted to age or educational levels. The potential exists to continually serve their students

during different phases and stages of development. This ability requires programs, services and offerings which are individualized and tailored while remaining consistent and appropriate.

What are community colleges and what are their unique positions in the overall educational scheme? Understanding the roles of community colleges will help individuals position their thinking to concentrate on what can be done to remove barriers to access rather than dwell on the effect those barriers create. It is the goal of this paper to help clarify that thinking.

Access to Knowledge

If you are a resident of the state of Illinois, chances are excellent that you are a part of a community college district. Ninety-two percent of the state's territory and ninety-seven percent of its population are included in a system of thirty-nine districts comprising fifty separate colleges. These percentages will increase as recent legislation calls for the entire

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state of Illinois to be included by the year 1990. As a constituent of one of these colleges, you are entitled to benefit from the college's programs, courses and services. You are also a contributor to the support and direction your college is required to maintain.

All community colleges publish a catalogue listing current programs, courses and services. Contained therein, the college displays its mission, philosophy and/or objectives. Despite a diversity among districts, one finds a certain similarity or common purpose alluded to among all colleges in the state.

Illinois community colleges provide extensive instructional and student support services to serve the needs of individuals as well as public services to address the needs of the community. Students, the general public, and businesses are served through various paths of instruction and services.

A breakdown of Illinois community college students shows that:

27% are enrolled in the first two years of baccalaureate education preparing for transfer to four-year colleges and universities.

Nearly 21% pursue remedial/developmental education to improve basic education skills in order to seek employment or continue further education.

Over 40% of community college students are selecting occupational education from among 242 occupational specialties and programs (Illinois Community College Board, 1988).

Student support services, including counseling and assessment, job placement, tutoring, and skills centers help students take full advantage of community college educational opportunities. Community and public service programs provide non-credit courses; workshops, seminars, and forums; and include cultural enrichment activities such as art fairs and theater productions. Most recently, business, and economic development activities, including training and services to business and cooperation with local economic development organizations, have contributed to commercial and industrial attraction and retention efforts.

The variances that do exist among colleges arise from variances in the districts and populations they serve. Through analysis, surveys and extensive use of local advisory committees, each college defines

and designs programs pertinent to its own local needs. The Illinois system was not always this varied—it has undergone changes in growth, scope and impact. The majority of these changes have occurred during the last quarter of the community college movement.

Originally conceived as extensions of local high school systems, junior colleges were viewed as strictly the first two years of a four year college education.

This history of development of Illinois Community Colleges lays seed to the current situation which exists for these institutions. Originally conceived as extensions of local high school systems, junior colleges were viewed as strictly the first two years of a four year college education. As such, they were mainly baccalaureate in nature and academic in scope. Access to vocational and occupational areas added greatly to curricula and outreach. In 1970 the role of adult basic and adult secondary education provided a vehicle for training previously 'unqualified' potential students. The role of remedial education became an accepted necessary component of the colleges' missions.

Many community college students need basic skills training to effectively participate in occupational training or pursue further education. Developmental and remedial programs are offered at all public community colleges to meet the needs of these individuals. Such educational services are increasingly important in training persons for entry or re-entry into the labor force. In fiscal year 1987, over 140,000 persons were enrolled in developmental and remedial programs at Illinois Community Colleges. This represents approximately 80% of all adult education enrollments at public secondary and post-secondary schools (Illinois Community College Board, 1988).

A further extension of community college services occurred in the area of economic development for each college district. The focus of community college partnerships with commerce and industry is a network of business centers located at every community college district, designed to provide training and services to business. While occupational and developmental/remedial instruction assist people in

entering, re-entering, or remaining in the labor force, business centers focus on assistance to business to promote business and economic development and ensure adequate job opportunities for citizens.

The primary functions of business centers are to provide customized job training for local commerce and industry, entrepreneurship training and consulting services for potential or existing small businesses, and assistance with attracting and retaining commerce and industry. Data from fiscal year 1987 indicate:

Approximately 1,400 companies and 37,000 employees were served through customized job training.

Community colleges provided small business services to over 30,000 potential and existing entrepreneurs.

Community colleges assisted with the attraction, retention, or expansion of nearly 170 companies, and help create and retain over 4,000 jobs.

Assistance was provided to 3,200 businesses, yielding \$67 million in contracts (Illinois Community College Board, 1988).

Many community colleges have established advanced technology centers to train students on state-of-the-art technology. These centers also provide the use of equipment to business and assist with the transfer of technology to direct application in business. Community colleges start and operate small business incubators to help nurture new small businesses and establish or operate labor/management councils to help improve local relations between labor and management—thus improve the local business climate.

Community college partnerships with commerce and industry serve to ensure that instruction is relevant to employer needs. Partnerships with commerce and industry provide students with opportunities within local firms for cooperative education internships and on-the-job training.

The previously mentioned paths of instruction and service have become highways. Even though in some instances they have become limited access highways. Community colleges are challenged to construct superhighways without restrictions of toll-booths and inaccessible entrance ramps.

Access to Vocational Education

Although community colleges offer a great variety of programs, services and economic training opportunities—barriers limit access to all individuals within geographic boundaries.

Dr. Michael Elliott, Director of Occupational and Adult Education programs at the Illinois Community College Board, recently compiled a list of 41 concerns expressed by Illinois community college deans of occupational education. Many concerns overlapped, but a pattern of ten categories presented challenges confronting community colleges. They are:

- Funding/support
- Impact of general education requirements
- Articulation with schools, colleges and industry
- New and alternative delivery of programs
- Staff development and inservice
- Credit computation and equivalence
- Trends and future development
- Regulatory procedures and rule changes
- Development of state-wide models
- Marketing

To address these concerns, the community college career deans along with Dr. Elliott, have planned workshops that focus on these issues. The following section addresses those concerns which create accessibility.

Funding and Support

From the middle 1950s when the General Assembly first made provision for state funding of community colleges, the growth and impact of the institutions caused an unsuspected—and unimagined burden—upon the state's commitment. The Illinois Public Community College Act of 1965 provided for a flat grant of \$11.50 per student per semester credit hour. In fiscal year 1973, the flat grant was increased to \$16.50 with a \$3.00 per credit hour supplemental non-business occupational program grant initiated. These rates were increased for fiscal year 1974 to \$18.50 and \$5.00 respectively. However, a supplemental appropriation of one

and one-half million dollars was necessary to offset costs created by increased enrollments.

In fiscal year 1975, the flat grant of \$19.20 with \$5.80 supplemental occupational grant created a six million dollar deficit due to dramatic enrollment increases. A subsequent proration in flat grant payments below that of 1974 marked the first time community colleges had not been fully funded at full rates upon which an appropriation had been based.

A 'Blue Ribbon' committee was formed by the Illinois Board of Higher Education which recommended in 1975 to shift to credit hour grants by instructional category rather than a flat rate grant. Supplemental grants were discontinued in lieu of the establishment of eight funding categories consisting of baccalaureate, vocational, remedial and general study areas. In 1979 the plan was revised which reduced the funding categories to five (Illinois Community College Board, 1988).

The state college system's enrollment peaked in 1981 with a fall head count enrollment of 388,369.

The figure for 1982 was 387,822. Many attribute this large enrollment to poor economic conditions and high unemployment—a situation which encourages workers to upgrade their skills. The enrollment average for the three years preceding was 335,022, and 352,537 for the following three years. The four year period from 1984 through 1987 showed a steady decline from 361,186 in 1984 to 324,163 in 1987.

This four-year period is a critical time span in the course of education— particularly vocational education. It marked the period of time when state directives and agency programs were instituted to increase access, efficiency, quality and sex fairness. The Illinois State Board of Education on December 13, 1984, adopted a new statement of policy and an administrative plan for Education for Employment. A need was cited to significantly upgrade the delivery system to meet demanding challenges of: 1) continuing and rapid technological change; 2) increasing change in the characteristics of the work force; 3) and support for the economic stability of individual citizens and the state ("Illinois State", 1985). Included in the policy statement was the affirmation that Education for Employment programs

will be provided to youth and adults through a regionally organized secondary delivery system and the existing system of community colleges.

The Illinois Board of Higher Education issued a report on "Public University Admission and General Education Requirements" in September of 1983, which was revised in 1984 to include subject-specific recommendations. The impact on vocational education in the secondary school was severe. Many secondary students abandoned vocational programs to pursue those courses which satisfied admission requirements. Some students, normally community college bound, confused the 'baccalaureate' requirements with 'college' requirements and assumed that they pertained to vocational programs as well. Such was not the case. Clarification might have assured distinction between the terms 'college requirements' and 'baccalaureate requirements.'

Increased emphasis on general education courses in Associate of Applied Science degrees (as advocated by the American Association of Community and Junior Colleges) created a revision in emphasis in some colleges toward general education as opposed to technical curricula. Further, revision to high school graduation requirements as set forth in PA 83-1082 of the School Code of Illinois created a re-emphasis in course selection which impacted vocational training courses for students entering community college non-baccalaureate programs.

One may conclude that the overall effect of recent mandates and directives has not been beneficial to vocational education.

The years 1984-1987 are significant as one reflects on the consequences of these mandates. During this four-year period of enrollment decline, one finds a decrease of 1.4 percentage points in baccalaureate apportionment credit hours from 47.3% to 45.9%. During this same time period, there was a decrease of 3.0 percentage points in occupational apportionment credit hours from 28.4% to 25.4%. Awards granted (certificates and degrees) during this four-year period also reveal changes. The Illinois Community College Board records show that from 1984 to 1987 AA and AS degrees increased from 34.5% of awards granted to 38.4%. Concurrently, AAS

degrees awarded decreased from 37.0% of awards granted to 34.0% while certificates in vocational areas decreased from 27.7% to 26.2%.

The Accessible Entrance

The Community College system has maintained an 'open door' policy. In general, any student may enter and proceed to maximum effectiveness and optimum level with the only restriction being personal limitations. However, some students found the 'open door' more like a revolving door. Students could enroll in community college programs with ease, but they often did not meet academic success and thus did not achieve their educational aspiration (Floyd, 1987).

The 'open door' concept may be a contradiction of terms. If a door is always open—why have it? The perception of the community college has become, and is intended to be, an entrance. It is the college's function to make that entrance as accessible as possible. Doors exist, but they are on the inside. They may temporarily block enrollment to certain programs and courses, but final admission hinges on sufficient preparation.

The greatest challenge to community college access is at the entrance—not at the door. Colleges need to become an entrance which is inviting and promising. Programs are needed which benefit the student and provide services which increase the student's eligibility. The major aid to accessibility is honest assessment of both the community and student.

Community colleges provided training for 1,395 companies through 1,954 courses serving 37,227 employees in fiscal year 1987.

Each community college, while part of the state system, must study its community and the opportunities which lie therein. The community and district are not necessarily coterminous. Opportunities for employment may exist in areas outside the college's district. Cooperative agreements among colleges which waive out-of-district tuition is an effort to increase access to programs for students.

Cooperative agreements outside the district are as important as those within. Linkage with other agencies is more than an initiative, it is a method of increasing and sharing programs and services. A regional delivery system for vocational education affords the college the opportunity to become a partner with the secondary school in matters of mutual benefit and progress. Reluctance to move in such a direction may hinder access. This is not the student's barrier, but the college's.

Outreach of the community college has extended from the main campus to shops, factories and businesses of the community. Illinois Community Colleges received more than \$3.7 million in fiscal year 1987 for economic development. These allocations enabled community college districts to operate business centers that provided training services to business and helped local economic development efforts. Further, 14 community colleges were involved in helping to establish or operate small business incubators (Illinois Community College Board, 1988).

Assessment of the student is as important as assessment of the community. Measuring a college by its number of graduates or completers is not indicative of the effort expended in assuring adequate preparation. Not all students enter the race at the same starting line. Completers are a culmination of:

Assessment
Correct advisement
Complete remediation
Educational assistance
Services as needed
Success academically.

Taken together, these are the areas that spell ACCESS. Unfortunately, colleges continue to be predominantly funded by the last item in that chain—semester credit hours. A redirection of emphasis is in order.

At a meeting in July, 1986, in Traverse City, Michigan, a group of community college professionals met to address important issues basic to the heart of the community college mission. The sub-

group created the following statements regarding access.

To ensure that the community college makes good its promise of educational opportunity for all, a redefinition of access is in order. Critical components of this continuing obligation of the community college include:

- 1. Establish and/or redefine college mission statements to focus on meeting community needs.*
 - 2. Ensure that institutional practices are consistent with the college missions.*
 - 3. Communicate clearly college mission, policies, and practices to the community.*
 - 4. Establish linkages with relevant community agencies and organizations.*
 - 5. Encourage students to maximize the probability for student success through college programs, services and activities (Floyd, 1987).*
-

Access for Special Populations

The community college has established its mission in five major areas. 1) It has become, and is, an institution of higher education. That fact is not contradictory to its ability to offer remediation, developmental and skill-level programs. 2) It reflects the community of which it is a part and is responsible to its residents' educational and training needs. It does not aspire to meet society's challenges without considering local influences. 3) It offers a comprehensive program while maintaining a special concern toward costs, scheduling, availability and flexibility. 4) It is first, and foremost, a teaching institution keeping as its goal the advancement, not of itself, but of its district. Finally, 5) it must be accessible to all populations within its boundaries. There can be no segment, portion or group more entitled to its services than any other. Every effort must be made to assure an outreach that is extended to assist the aged, poor, non-traditional and handicapped.

The thread of open access may be traced down a number of avenues (e.g., the GI Bill, the Truman Commission Report, Brown v. Board of Education). However, the confluence of three events made the American dream of open access to higher education

a reality (Vaughn, 1988). First, the baby boomers reached college age in the 1960s. Unlike their parents, they assumed that pursuing higher education was a right—not a privilege. Second, the open society of the more liberal-thinking politicians became a reality during the 1960s as the nation moved to eliminate poverty and its progeny, ignorance. Third, the Higher Education Act of 1965 and its later amendments, especially the 1972 amendments, made it possible for virtually everyone who could establish a need for financial assistance to receive it (Vaughn, 1988).

The 50 community colleges in Illinois provide a total of 3,581 associate degree and certificate programs within 242 discrete occupational specialties. These programs are vocational, technical, and semi-technical in nature. They provide job training, retraining, and/or upgrading of skills to meet current and emerging local, regional, and state manpower needs. The occupational programs and vocational skills courses serve a diverse population. Consider these characteristics:

- *The median age of students enrolled in occupational programs which lead to occupational certificates and/or degrees is 22.4 years. The median age for persons taking vocational skills courses for upgrading and retaining is 32.8 years.*
- *20% of the students in occupational programs and courses are minority students.*
- *55% of the students in occupational programs and courses are female (Illinois Community College Board, 1988).*

Community colleges have established a good record in providing vocational education to special population groups. Women, minorities, handicapped, limited English proficient, and the elderly have received attention and support.

Severely lacking are programs for special education students who have received training and services in the public school and for which little has been done at the community college level. Remedial courses are not the answer for learning disabled students. Vocational programs are needed to provide training at a level and pace not expected of certificate and AAS degree students. While many colleges are working to provide course work and develop programs to help learning disabled students, some students are doomed to failure when placed in exist-

ing curricula. This barrier to access will take much time and effort to remove.

Summary

The Illinois Community College System is a relatively new structure. The system has spent much of its growth creating an identity and defining a position. Given the financial fluctuations which have occurred during this growth, community colleges have earned a sense of pride and level of accomplishment. The structure has been very accessible to community needs.

Following are several aspects of the community college structure that may benefit from improvement and development:

- *Assure that state mandates provide sufficient resources and are clearly targeted to benefit specific areas without detracting from others.*
- *Consider funding levels or methods of sup-*

port which address needs other than course work.

- *Look to greater uses and expansion of cooperative agreements between districts and colleges.*
- *Increase cooperation and articulation opportunities afforded by linkages with other agencies and involvement in Education for Employment initiatives.*
- *Extend opportunities for business and industry to receive and offer training as more active partners in education.*
- *Address the issues of assessment, advisement, remediation and assistance as a realistic part of a curricular goal.*
- *Develop occupational programs targeted for special education students funded through headcount and service as opposed to credit hour generation.*
- *Continue to work toward removal of barriers which hinder fulfillment of the college's mission.*

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Access to Vocational Education: A Guidance Counselor's Perspective

by Kathy Dingler

Guidance Counselor: Guidance consists of support services to help students gain understanding of their social, intellectual, and emotional development; become knowledgeable about educational, occupational, and social opportunities; learn decision making and planning skills; and combine these insights into personal plans of action. Counseling, as one aspect of guidance, focuses primarily on communication between counselors and students about issues that facilitate or inhibit personal planning, feelings of self-esteem, achievement, and choice (Keeping the options open, 1986).

The graduating class for the year 2000 has completed its first year of public education. We already know much about the future for these youngsters. Some of them will find employment as doctors, lawyers, scientists, teachers, firefighters and police officers. Their childhood dreams of what

they want to be when they grow up will become realities. Other children may also dream of becoming forest rangers, railroad engineers, Dallas Cowboys, or Cleveland Indians. Will they, too, realize their childhood dreams? Probably not.

Trends for the year 2000 have been predetermined by the current patterns of our lives. The graduates of the year 2000 will most likely be finding employment in executive and administrative positions, as professional workers in many fields, or trained technicians and support workers. Positions for workers such as middle management, clerical assistants, farmers and laborers are declining (Monthly Labor Review, 1987). Later retirement, office and factory automation, changes in consumer needs and increased imported goods have all attributed to shifts in our work force. Implications of these developments focus on the need for a highly educated work force.

For many years, business and industry have been telling educators what they would like to see in future employees; what they think schools should be teaching. Their ideas include the basics, reading,

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writing and mathematics. They also want their employees to be loyal, honest, responsible, accountable and prompt. They would appreciate other attributes such as creative thinking, decision making, problem solving, communication and human relation skills. Being able to guarantee the graduating class of 2000 these abilities would guarantee them success in their personal lives as well as in their careers. However, educators today can no more make such promises than they could one hundred years ago.

We do have opportunities to work with youth that did not exist a century before. Boys used to be considered men at age sixteen. They were expected to leave home, get a job, marry, raise a family, and live happily ever after. Things have changed. The phenomenon that exists now is called 'adolescence.' We have created a society and an educational system within that society that allows our youth to develop, learn, and mature slowly under our custody for a longer period of time.

The Issue of Excellence

The emphasis in education during the last few years has been 'academic excellence.' Many schools have accepted the challenge and altered their graduation requirements to more closely coincide with mandates presented by the State Board of Higher Education. The majority of adjustments have come in the curricular areas of mathematics, English, science, and social studies. Increases in required academic areas have, consequently, either reduced the number of elective choices to students or lengthened the school day.

***A growing number of students
visualize high school as a term of
imprisonment.***

Schools have been in this cycle long enough to notice repercussions to this trend toward academic excellence. Not all students are going to attend a four-year university. Not all students who begin a baccalaureate program will remain to finish in four or five years. A growing number of students visualize high school as a term of imprisonment. They move from school to school, or program to program,

without any insight or reasoning behind the decisions they are making. Many leave high school sometime during their junior or senior year without the skills to manage full time employment—nor the motivation to return and finish their education (Hilton, 1979).

The search for academic excellence will need to be restructured into the quest for **effective education**, where the needs of all students can be addressed. The old dividing lines of college preparatory, general education and vocational coursework should be removed and replaced with more open-minded pathways, allowing for greater academic freedom. The final destination of all students—at the end of their educational pursuit, at whatever level they choose, will remain the same as it has been for decades; to seek gainful employment.

***Improved decisions and better
planning increase the number of
appropriate students participating in
vocational courses due to the students'
heightened awareness of personal
strengths and aspirations.***

The guidance counselor is a factor in achieving an effective educational program. The planned intervention of guidance, beginning in the junior high or middle school, can improve the overall quality of education based on better student decisions. Improved decisions and better planning increase the number of appropriate students participating in vocational courses due to the students' heightened awareness of personal strengths and aspirations. (See Appendix A for research statements regarding the involvement of guidance.)

To establish the role of guidance counselors, assumptions regarding the nature of secondary vocational education effect the perceived roles of guidance counselors:

Tomorrow's workers will be trained and retrained as many as five to seven times during their working life. Such training and retraining will require workers to have a foundation in basic skills and technological principles.

Even in this period of change and relocation, there will not be a dramatic nor rapid disappearance of the jobs we know today. A great majority of workers, ten to fifteen years from now, will earn their living

in a job market and a working environment more like today's than unlike it.

To compete successfully in the job market, students not only need job skills, but employability skills. Work ethic, task orientation, productivity, a sense of responsibility and employer allegiance are important traits of today's successful workers. Employability skills such as these can be taught in a classroom and laboratory setting.

Vocational curricula, at the secondary level, offers a blend of academic and job preparatory programs so that academic standards are not sacrificed while the student learns entry-level job skills.

Not all students graduating from high school will want to, or be able to, continue their formal education; some will seek jobs immediately after graduation. To be employed, they will need some entree into the job market, such as vocational skills.

Secondary vocational education accommodates the educational and employment training needs of a diverse population. Women will continue to enter the labor market at an increasing rate. More pressure will be put upon vocational education to serve the needs of women and other minorities. Moreover, vocational education will serve increasing numbers of the educationally, socially and economically disadvantaged and handicapped, in addition to, academically gifted individuals.

Secondary vocational education is not viewed as an end in itself, but as a means to help students get their first job. The first job does not necessarily set the direction of a career. It does, however, allow a career to begin. Even a first job with no future allows new workers to learn the habits and customs of the workplace, increasing their chances of moving to better positions.

Secondary education is responsible for combining occupational preparation within basic academic skills. Students need to spend a significant part of the school day achieving proficiency in both occupational and academic endeavors. Vocational curricula, at the secondary level, offers a blend of academic and job preparatory programs so that academic standards are not sacrificed while the student learns entry-level job skills.

Secondary vocational education must relate to the current world of work. Vocational education establishes and nurtures an effective working relationship with business, industry and labor. The vocational instructional environment simulates conditions on the job in both process and function.

Finally, successful completion of a secondary vocational program does not deny students the option of a higher education. Skills and abilities gained in secondary vocational education programs transfer both directly and indirectly to institutions of higher learning (*Keeping Vocational Education at Work*, 1984).

Vocational education and guidance are both concerned with the total development of each student. Both programs are structured to recognize the need for adolescents to be aware of their strengths and weaknesses, principles and attitudes, before reaching the age and demands of adulthood.

Middle Schools/Junior High School Programs

Prior to making educational and/or career choices, middle school and junior high school students must be provided with the knowledge and skills needed to enable them to decide and choose wisely. The first element of a comprehensive guidance/vocational program, beginning in the middle school or junior high school, should be helping students discover who they are as individuals. Awareness of their values and beliefs will create a base from which future decisions may be more accurately derived.

Another component is assisting the individual student with skills necessary to manage a growing sense of independence. These people are adolescents; neither children nor adults. They wear fifty dollar jeans, trade forty cent baseball cards, and believe 'forever' lasts between one week and one month. They need other adults and peers to serve as models for future life patterns.

The next two factors, knowing the steps involved in decision-making and understanding and using communication skills, are held in high regard by both institutions of higher learning and business personnel. Because these are vital life skills, they will be presented repeatedly during the educational process by different people (counselors, teachers,

administrators, etc.), in various and unique settings. Each lesson will be equally important and help reinforce the personal strengths possessed by students.

Recognizing the learning styles of students is another important part of the guidance/vocational program. According to Bernice McCarthy, author of the **4-MAT SYSTEM**, all people learn using one or more of four learning styles. Each style uses either the right or left hemisphere of the brain. Briefly, Type One learners like to know why they are doing a task before they begin. Type Two learners do not care about why, but would rather know how they are doing and have all the facts needed to do it. Type Three individuals are not interested in either of the above, but want to know whether or not it works and can they try it. Finally, Type Four learners do it for whatever reason, without directions, and then want to share 'it' with everyone.

The guidance/vocational program must also teach students to deal effectively with conflict and adapt quickly to change.

Individuals prefer learning using one, perhaps two of the above mentioned styles. Teachers prefer teaching using one or two of these styles. Teachers and students alike are quick to recognize their own strengths and focus attention upon them. A problem comes into being when these styles do not match and learning takes extraordinary amounts of energy. All four learning styles may be used by both teachers and students to develop healthy attitudes about their weaknesses and further their ability to learn and teach. Learning style information can be used to assist the student in the actual process of learning. It can also broaden the number of courses that are appealing, and therefore, potentially successful in high school. Learning style information also provides a more complete picture of occupational characteristics in relationship to personal strengths and preferences.

The guidance/vocational program must also teach students to deal effectively with conflict and adapt quickly to change. New freedoms and independence often make cooperation and collaboration difficult to manage. Students need classroom opportunities to practice these social skills and learn to exercise acceptable behavior controls.

Students also need to be moved in a direction where they can learn to relate information about themselves (their styles, abilities and interests), and apply this information to broad occupational areas. They need to learn about career planning and assume responsibility for it. They need to work with their interests, learn their educational choices as they immediately affect them in high school, and make life preparations moving in the direction of the goal (or goals) they have chosen to pursue.

A certain degree of mastery is needed in the above skill areas to ensure a successful transition into high school and then on to employment or further education. The counselor's involvement in student mastery of these skills will require three levels of guidance intervention. Many of the above goals should be introduced by the counselor either in a group setting with students or working individually. This level of guidance is very effective, but will require a program designed to monitor student progress and participation in addition to checking on content areas covered. A well-planned program will also provide for evaluation and revision by both the counselor and the participants.

The second level of guidance input calls for joint collaboration with other building staff members. Areas like communication and decision making or problem solving skills can become the responsibility of every adult in the building. Daily intervention of inappropriate behavior and instruction in appropriate responses can bring about quick change. Repetition and reminders of proper utilization by everyone will promote the mastery of these skills. Counselors involved in this level of guidance can work directly in the classroom on special projects, or be used to provide staff inservice programs.

Local businesses are much the same, lacking the knowledge of how to offer assistance and resources to schools.

The third level of guidance intervention involves organizing the community (local businesses, industry, agencies, parents, etc.), and bringing these resources to the students. Community members represent thousands of volunteer hours and potential funding sources. Very often they need only to be asked for help or have a project suggested for their involvement. Local businesses are much the same,

lacking the knowledge of how to offer assistance and resources to schools. Career days are excellent ways to introduce these people to the educational system. They provide an opportunity for students to learn about traditional and nontraditional career choices, and they introduce student needs to presenters. Guest speakers and field trips also serve as ways to bring the school and the community together. Using the counselor in this capacity requires many hours of community work without direct service to students. It is important for building staff and administration to recognize the usefulness of this area of programming and provide their support.

Parent Involvement

Contrary to popular belief and the current image of adolescence today, teens do respect their parents' opinions on major life issues; including education and career direction. Also, there is evidence that parental expectations about what students will do after high school graduation affects academic performance, motivation and personal aspirations throughout their school years. Unfortunately, many parents are unaware of the extent of their potential influence and are only limited by their own experiences to be effective. The labor market and economy of today is much different than when these parents were making their own plans. Statistics also indicate that parents of our students spent more time in pep assemblies than they did in career preparation. If we, as educators, expect parents to advise and influence their children with regard to education and careers, they need programs and materials with which to work.

One of the best programs currently available is "Today's Youth and Tomorrow's Careers" designed by Luther B. Otto. Counselors attend an intense training workshop and receive the necessary information to present parent seminars. Each of the four parent sessions has a different focus based upon the book, *How to Help Your Child Choose a Career* (Otto, 1984). The first session describes how a society, employment opportunities and career preparation possibilities have changed since these parents entered the labor force, and how parents can influence their sons' and daughters' career plans. The second session deals with today's labor market:

how to think about it, what the employment projections are for industries and occupations, and where to get and use the best information available on employment projections. Session three focuses on career preparation involving college education; and session four is on choosing and preparing for a career while working. Each session has take-home activities for the parents to use with their children, in addition to a student workbook that reviews the career choice process.

The program, "Today's Youth and Tomorrow's Careers" and others like it, dramatically demonstrate that parents can do more in helping their children in school than only encouraging homework or attending annual open house meetings. It encourages parents to get involved early, and stay involved throughout their child's high school program. It demonstrates clearly not only the need to assist in career choices, but also in high school course selection, exploration of learning facilities beyond high school, and the need for financial planning to make that kind of education possible. A high school diploma no longer insures a good job or a stable career, and a college education is not the only way for a young person to prepare for a career. However, options must be explored early enough to allow for adequate preparation both in school and within the parameters of the family structure for these options to represent feasible, future possibilities.

High School Programs

A common perception of vocational education at the high school level is something apart from, or in addition to, secondary college preparatory or general education. This view is shared by academic and vocational teachers, as well as students, parents and the community. A good job is not being done with integrating academic education. Vocational skills and knowledge have not been identified that may be taught directly in academic classes. The recognition of different learning styles and the need to offer alternative ways of learning have made these gaps in effective education more apparent (Hamilton, 1984).

Vocational courses are often considered easy, practical, and experiential courses that require little thinking or homework. Conversely, academic courses

ses are generally perceived as difficult, abstract, and require extensive use of the brain and involve large amounts of homework. Both perceptions are limiting to students, but both commonly exist. A need exists for 'gap courses'; classes that readily exhibit characteristics of both and are viewed as such by the students. Teamwork involving vocational and academic teachers in curriculum development and teaching may be required to get the concept moving. This kind of programming may help remove the stigma attached to vocational courses.

Counselors need to develop a more assertive role with teachers if comprehensive and integrated vocational programs are to succeed.

Guidance counselors should be central figures, not accessories, in meeting the needs of students. Counselor involvement will include the responsibilities started in the middle school/junior high school programs and progress, in depth, from that point onward. Students who have experienced the middle school/junior high school model program will be prepared to gather more information on their own regarding career choices and preparation. A wide range of computer programs like *Discovery* or *GIS (Guidance Information Systems)* are available and can be used by the students. They provide data and immediate feedback relating to interests, future career goals, occupational information, vocational training programs and institutions of higher learning. Paraprofessional aides and community volunteers can assist students in gathering this kind of information. This will permit more time for the counselor to relate and integrate this data into the student's educational program. Knowledge of the student, his or her future goals, and of the content of course offerings in the high school, will help the counselor and the student develop a comprehensive educational plan that is flexible, not limiting in scope, and will lead to the desired goal (or goals). Computer and paraprofessional assistance will also make it possible for the counselor to cover this material with new students, and give them the kind of individual attention needed for students without the proper background preparation.

Counselors need to develop a more assertive role with teachers if comprehensive and integrated voca-

tional programs are to succeed. That is, counselors should be involved in curriculum development and revision. Because of their central position in the educational process, they can provide input more holistic in nature and in line with student needs. They can assist in providing materials related to self esteem, problem solving and decision making, and coordinate these efforts so student activities are not duplicated. Counselors can direct new materials regarding careers and opportunities specifically related to subject areas to teachers. Counselors can serve as resource people for information on community services, speakers and specialists, and as coordinators for field trips, internships or other related experiences. Active and enthusiastic counselors can greatly enhance the receptiveness of teachers to integrating vocational education into other disciplines.

The prevailing image of what a counselor does with his or her time must also be addressed if the counselor is to successfully improve student access to vocational education in high schools. Counselors need to be seen as doing more than registration, crisis intervention and getting students into college. The spectrum of guidance activities must be seen to transcend the walls of the counseling office. Certain guidance activities must also be assumed by other building staff members. Just as English is not the only department involved in teaching reading comprehension, guidance should not be alone in teaching responsibility, honesty or problem solving. Counselors, to be successful in vocational education, need to move out of their offices and into the building and community. Support from both the staff and the administration is necessary for this to occur. It means also that counselor case loads should be in line with the 250:1 ration recommended by the Department of Education and the American Association for Counseling and Development. Trying to do too much with too many is as unproductive as too little, too late.

The following suggestions are just that; things to think about for including or revising the current vocational education program in the high school. The majority of suggestions directly or indirectly involve the counselor. Some of the suggestions will require decisions made at a higher administrative level, but then the ideas must start somewhere and be initiated by someone.

Counselors can:

- *become active in curriculum development and revision throughout the building.*
- *assist in planning and presenting teacher inservice programs.*
- *encourage and arrange for teacher work experiences.*
- *become acquainted with representatives from community businesses, industry and service agencies.*
- *invite community members (business, industry, parents, etc.) into the school to teach mini units or single lessons for classes.*
- *work with local businesses and industries to arrange pre-apprenticeship and apprenticeship programs, internships and on-the-job training situations.*
- *regularly post employment trend information.*
- *become the resource person for current vocational and career materials.*
- *prepare career education materials and pre-employment materials for student use. These materials could be used by teachers and counselors, in the library, etc. They should be in a form easy for students to carry.*
- *compile lists of consultants, speakers, etc.*
- *be responsible for and active in a Career Fair/Career Day. The activity can be arranged for the exclusive use of the high school, or involve the community and/or several high schools.*
- *provide for work observation opportunities and hands on experiences. Field trips could include job shadowing.*
- *assist the library in a career program to better utilize its resources. Most students in average courses do not gain exposure to these experiences. The library is an excellent resource to expose nontraditional careers, highlight biographical or autobiographical materials, disseminate new information or hold workshops on topics such as where to look for a job—using the library as a source.*
- *offer programs to parents that are useful for all students, such as choosing a career, financing higher education, drugs and the student, registration choices.*
- *invite parents to participate in a meeting where their child's academic program for the following one, two, or three years is being planned.*
- *equalize individual 'future' planning time for the college and non-college bound student.*
- *encourage individualized education plans for special education students to include activities and goals related to career exploration, vocational preparation and a look at future employment opportunities. An active work program should be part of the senior educational program for many special need students.*
- *organize visits to community colleges and technical trade centers during the school day. Many students attending school and working are not able to make these important explorations after school hours.*
- *organize paid summer work programs for gifted students that offer experience and instruction.*
- *arrange paid work experiences for students with advanced skills who are not involved in cooperative work programs. Experienced computer students might work in a bank, local news office, insurance company, etc.*
- *organize paid summer programs for students who do not meet the federal and state requirements required for programs like STEP (Summer Training and Education Program) or JTPA (Job Training Partnership Act).*
- *assist with STEP or JTPA programs or get them active in the area.*
- *facilitate job placement for high school students.*

- establish a relationship with local employers for job placement guarantees when students complete coursework and meet grade expectations.
- establish a relationship with local employers for job placement guarantees upon course completion and grade requirements.
- use successful vocational students as guides or big brothers/sisters for new students.
- encourage high school alumni to return and tell about their accomplishments.
- get vocational departments active in student recognition, displays, demonstrations (during lunch mods with videos or slide shows), promote the sale of student-made products to draw attention (t-shirts, printed notebooks, wooden toys, food, bumper stickers). If items cannot go into a bookstore for sale year round, how about a special promotion two weeks before registration?
- encourage teachers to promote their program; talk to students about sequential or related courses. If it is not important to the teacher to encourage further participation in the program, why would the student be inclined to continue? Natural curiosity only goes so far, the rest needs to be nurtured.
- use successful vocational students to recruit peers into the program.
- promote unique assemblies related to vocational classes or programs.
- recognize students for career education work. Outside funding could make this quest very rewarding to students.
- elicit financial rewards from businesses who use students when they complete or have accomplished exemplary work in high school.
- publish a vocational education newsletter to district parents and high school staff. Monthly articles could be added to the current newsletter to keep the public informed about the vocational department. Students should also be encouraged to write articles and put photos in the student paper.
- sponsor or enter competitions that involve skills covered in vocational programs. Then, use lots of publicity to let people know what you have been doing.
- design a technical summer camp for juniors and seniors.
- plan a recognition night with merit awards for outstanding student projects or accomplishments.
- supply special certificates, in addition to diplomas, to further explain extraordinary advanced accomplishments in vocational programs.
- Lobby for extracurricular activities (meetings) to be held at times that do not discriminate against vocational students (before school, during the school day, at night, Saturday, etc.).
- organize mini courses offered by various staff, such as: how to change your oil, cooking for 20 hungry friends, writing a resume, selling yourself in an interview, etc.
- offer remedial courses before the regular school day or on Saturday.
- implement peer tutorial programs before, during or after the regular school day.
- use flexible scheduling to allow for increased class hours on certain days and shorter hours other days. This could be done in conjunction with other laboratory classes having the same needs.
- allow for flexibility in scheduling classes for students in cooperative education programs; either providing for work hours before or after the regular school day. Schedules could also include longer cooperative classtime for three days and earlier release two days. There are many creative combinations for scheduling that are limited only by inflexible occurrences in the master schedule.

- *consider curriculum modifications to include cooperative work experiences directly related to specific course work in high school. Supervision done by the instructional teacher connects work and the need for education. It also enhances the material covered in class with experiences on the job. This connection is very important and often overlooked in traditional cooperative work programs where one class, with an instructor, encompasses all students without regard to interests or work areas.*
- *arrange unpaid work experiences for students for credit.*
- *adjust required graduation requirements for students involved in 'pure' vocational programs. To be effective, this should not be used by students as a 'last chance' effort to get a diploma, but rather a well conceived four-year plan.*
- *change the credit offering for vocational courses. Because many high schools use weighted grades, some students are penalized for taking regular courses. This could be eliminated if advanced vocational classes, second year computer programming or third semester drafting for example, could be offered as honor courses and other regular classes be offered for non-credit.*
- *provide financial aid (or scholarship) for vocational courses that have high fees, require expensive equipment or incur large material costs.*
- *develop a program to reach out to students who have dropped from school. A newsletter about school activities and vocational and employment opportunities may be offered to former students. Programs that include night school, community college coursework, and combination job and classes can be used to encourage dropouts to complete high school and achieve employment success. Many programs underwritten by education departments, federal funding, etc., have guidelines that may be adapted and adopted by other districts or communities.*
- *encourage local institutions of higher learning to provide courses with free tuition to students currently enrolled in high school.*
- *reimburse or partially refund student tuition for enrichment coursework done at night or during the summer.*
- *work with local community colleges or technical trade centers to arrange for students to earn high school credit and college (or apprenticeship) credit at the same time. This could be done in the high school using high school personnel during the school year or on campus during certain hours of the day, night or summer.*
- *seek equipment donations from local businesses. It may expand existing equipment and add to the overall effectiveness of the program.*
- *encourage local businesses to donate use of equipment to the high school program. They have a chance to hire students trained to use this equipment during the summer, part time, or after graduation.*
- *develop a mentorship program linking students with adults who would be good role models and advisors.*
- *encourage local agencies, private donors, etc. to fund projects for 'at risk' students. Cleveland gives money credit for A's, B's, and C's that can be used upon graduation to pay for college or technical training. New York has Eugene Long and his PS 121 project where he has provided incentives and tutoring for students since grade school. Private and public funding sources may not allow for such large and expensive projects, but something can be done for the 'at risk' population that will encourage graduation and a future that allows them to be self-sufficient.*

Summary

Challenges for the Class of 2000 have been cast. Time for organization, program development and implementation is there, but not enough time to permit delay. Counselor retraining (or training) will be needed to help turn a good idea into reality. Success will also depend on the involvement and support rendered by building staff and administrators. An ambitious counselor will be just that; an ambitious counselor. Should the counselor leave, the program would also disappear. The reason for having a comprehensive guidance program should be clear to every participant, including the students. A commitment to the program by everyone involved is needed for it to be a success. The responsibility of vocational counseling will also fall in with other duties in the

guidance department. For the students to benefit from any counseling effort, the student to counselor ratio must be close to the recommended 250:1. Working with larger numbers does not permit an effective relationship to develop between the counselor and the student.

A statement from the *Nation at Risk* portrays the position of the guidance counselor quite nicely; "...excellence costs but in the long run mediocrity costs more." Guidance departments should identify their current and future priorities and remove or delegate unwanted or unnecessary tasks. They should then choose ten of the activities presented in this paper to replace those removed. The vocational department would feel the effects immediately. To increase student access to vocational education, one must approach the problem with serious intent for change.

Appendix A

Research Statements Regarding the Involvement of Guidance

1. Students exposed to systematically planned career guidance classes dealing with topics such as values clarification, decision making, job satisfaction, sources of occupational information, work-power projections, and career planning, make greater gains on self-knowledge and the relationship of self-knowledge to occupations and engage in a greater number of career-planning activities than do students who have not participated in such classes (Egner & Jackson, 1978; Hamdani, 1977; Omvig, Tollocy, & Thomas, 1975).

2. Junior high school students provided guidance programs specifically designed to do so gain more knowledge and desire to explore nontraditional jobs than do control groups (Cramer, Wise, & Colburn, 1977).

3. Student users of computer-based guidance systems make greater gains of such characteristics as degree of planning, knowledge, and use of resources for career exploration, awareness of career options open to them, and the costs or risks associated with these options than do non-users (Herr, 1978; Meyers, Lindeman & Thompson, 1975).

4. Both individual counseling and group counseling that involve specific training in self-assessment, gathering pertinent career information, and planning skills can enhance student career planning (Stewart & Thoresen, 1968).

5. Life role-planning units in classroom formats are related to higher student scores on decisiveness in their occupational choice selection; the extent to which career decision making is seen as an orderly process requiring thought and personal action, and the extent to which students believe themselves to be the chief decision makers of their own occupational choice (Amatea, Clark, & Cross, 1984).

6. Students exposed to guidance processes become more competent decision makers, select high school courses, and make high school plans more con-

gruent with their abilities than do students not exposed to such processes (Tyler, 1969).

7. Guidance processes can help students sharpen and commit themselves to educational and occupational actions on the basis of personal values (Herr, 1978).

8. Counseled students in the middle school have been found subsequently to make more realistic choices in choosing high school courses and seeking part-time work according to adult jury ratings (Randall, 1973).

9. Through group problem solving methods, students can be helped to understand the relationship between educational and vocational development, clarify goals, and acquire skill in identifying and using relevant information for their decision making needs (Babcock & Kauffman, 1976).

10. Female senior high school students exposed to guidance programs emphasizing career awareness gain significant improvement in overall career awareness and in factual knowledge of the occupational status of women (Woodcock & Herma, 1978).

11. Short-term counseling (three sessions) with high school students has been found to facilitate the career maturity of these students with regard to emphases such as orientation to decision making, planning, and independence of choice (Flake, Roach & Stenning, 1975).

12. Guidance and counseling processes can help the younger worker sort out available work choices, consider personal commitments to work, and develop ways of deriving feelings of psychological competence in the workplace (Aiken, Isenburg, Bales, Brewer, Goss, & Sackrisson, 1976; Herr, 1977).

13. Young workers who have been trained in job search and interview skills, communication and human relations at work, are more likely to make an effective transition to work than are workers who have not received such training (Aiken et al., 1976).

14. Disadvantaged youth who participate in counseling are more likely to achieve salary increases and job satisfaction than are those who do not participate (Herr, 1978).

15. Behavior rehearsal in which young workers can act out or role play with a counselor specific, work-related social and interpersonal problems is more effective in resolving such problems than is direct advice (Lazarus, 1966).

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Access to Vocational Education: A Local Administrator's Perspective

by Joel Scheider

Introduction

A growing need exists within our changing society to provide transferable skills to young people so they may succeed in a wide range of emerging employment settings. Vocational education can play a significant role in helping to meet this need, but currently there are many barriers limiting student access to vocational programs and services. If we are to overcome these challenges, a variety of changes must occur at local, state and national levels. These changes may require redefining vocational education as we have known it. A variety of solutions should be considered if opportunities are to be extended to those students who can benefit from technical and career education.

In Illinois, the Education for Employment (EFE) initiative is providing a major refocus for vocational education. Since 1985, sixty-one new regional

vocational systems have been established. In each system, a director has facilitated a series of regional activities intended to enhance the efficiency and effectiveness of vocational programs and services.

This chapter is written from a system director's perspective and reflects the input of several of those local people who are directing regional delivery systems. The author discusses the current state of vocational programs and services, identifies barriers to student access, and examines many of the issues related to access. A portion of this discussion highlights the potential of using technology to enhance student access to vocational programs and services.

Access to Knowledge

During the last decade, a number of national studies have focused on the status of secondary education in America. Most have been critical of high school students' performance, and many have called for an increase in the academic requirements for high school graduation. State and local educators

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have responded to these criticisms, and some of their actions have limited the occupational options for students.

Students are finding it increasingly difficult to understand the relationship between the academic requirements of school and skill requirements of a job or career.

These actions have caused some groups to voice concern for students whose needs are being ignored. In its report, *The Unfinished Agenda* (1984), the National Commission on Secondary Vocational Education suggested that a preoccupation on academics and preparation for higher education is not consistent with the fact that most jobs (80%) in America do not require a four year baccalaureate degree. Furthermore, the Commission commented that a majority of high school students will not obtain a baccalaureate degree. A more recent report by the William T. Gant Foundation (1988) stated that nearly 20 million Americans between the ages of 16 and 24 are not likely to go on to college. And while this report generally agrees with many of the school reform initiatives, it suggests that the initiatives often ignore the needs of large numbers of students who are not going on to college.

It appears that the educational system rewards students who learn well through conventional paper-and-pencil tasks. However, the system should not penalize young people who learn best in other ways. Such learners may have the skills and abilities to become highly productive adults, but they need help in getting started. Our school systems should provide varied learning experiences that take advantage of students' abilities, rather than ignore those young people who do not fit in 'the proper mold' (William T. Gant Foundation, 1988).

A loss of continuity is being created within the educational process (Parnell, 1985). Students are finding it increasingly difficult to understand the relationship between the academic requirements of school and skill requirements of a job or career. Currently, educators are moving away from a basic responsibility to help students find meaning in learning. This movement is unfortunate, because if stu-

dents are to be motivated to learn, they must know why they are learning, how this learning connects with other learning, and where this learning relates to real life (Parnell, 1985).

For its part, vocational education has added to this loss in continuity by failing to keep pace with America's movement from a manufacturing-based society to an information and service-based society. The most recent economic predictions suggest that:

- *most of the jobs emerging in the American economy will require some type of post-secondary training,*
- *today's middle-skilled jobs will be the low-skilled jobs of the future,*
- *only one quarter of the emerging jobs will be low skilled as compared to nearly 40% of all the jobs in today's economy (Guiton, 1988).*

Vocational education can play an important role in helping students develop skills to compete for these emerging occupations. However, vocational education has not kept pace with recent shifts in the economy. As a result, many vocational programs are providing students with practical experience in developing basic skills and general abilities, but they are no longer adequately preparing students for specific jobs or careers (William T. Gant Foundation, 1988). If vocational education is going to remain a viable part of the educational process, it must begin to help students develop the skills that will insure job success.

Dr. Bonnie Guiton, Assistant United States Secretary of Education, has recommended that secondary vocational programs focus on achieving five basic goals:

helping students to develop basic academic skills, reflecting labor market needs, expanding public/private partnerships, providing better coordination and eliminating needless duplication in programs and services, measuring student outcomes to promote mastery of basic and technical skills (Guiton, 1988).

Leaders in vocational education seem to recognize the need to increase vocational education's emphasis on the mastery of academic skills, while also improving its commitment to help students develop technical skills for emerging occupations. In a recent position paper, the National Association of

State Directors for Vocational Education (NASDVA) emphasized that academic and vocational concepts must be thoroughly infused to prepare students for today's technological society. The Association pointed to vocational education's traditional role in reaching those students who are not benefiting from academic education, and suggests that its competency-based curriculum and applied learning tradition provide a positive means for insuring that students leave school with skills necessary for employment (National Association of State Vocational Directors, 1988). However, if vocational education is going to continue this role in the future it must deal with four issues:

- *improving the ability of individual teachers to work with students possessing diverse learning styles and abilities,*
- *insuring instructors' knowledge, experience, and understanding of the current academic and technical skill requirements of their respective occupational areas,*
- *providing quality curriculum and equipment to instructors and the students whom they instruct,*
- *increasing the time available for students to participate in vocational education.*

Illinois and the Education for Employment Initiative

The changing demographic and economic patterns in Illinois are consistent with those documented at the national level. In an attempt to meet the challenges that these changes represent, the Illinois State Board of Education has adopted a policy on education for employment. The policy was designed to address three primary challenges:

- *the rapid technical changes occurring in the workplace,*
- *the changing nature of the workforce,*
- *the need to support the economic development of individual citizens and the state.*

Most important in this policy initiative is the State Board's commitment to assure that all students attain appropriate levels of achievement in areas fundamental to their development for employment and/or continued education for future employment.

The State Board also approved an administrative plan as the framework for more efficiently delivering quality vocational programs and services. Central to both the policy statement and the administrative plan is the State Board's assurance to all students of equal access to these programs and services ("Illinois State Board," 1985).

Since the State Board first adopted its policy on vocational education:

- 1) *sixty-one regional systems were established,*
- 2) *articulation agreements between each regional system and their respective community college(s) were created,*
- 3) *each system prepared a local plan to address:*
 - *vocational staff development needs,*
 - *student services needs,*
 - *vocational program development needs,*
 - *equipment and facility needs,*
 - *the role that local business, industry and labor can play in helping to achieve these goals ("Illinois State Board," 1988).*

These efforts were designed to improve access, quality and efficiency in the vocational programs and services offered throughout Illinois. Progress is occurring, especially with regard to improving quality and efficiency, but many barriers continue to limit student access. The need to create new ways to provide vocational opportunities for all groups is critically important to the future economic stability of students, the communities where they live, and the state.

Access to Programs and Services

Who is being served by secondary vocational programs?

In Illinois, secondary vocational programs serve a diverse range of students, but as academic requirements increase, a growing percentage of students who enroll in vocational programs are:

- 1) *identified as non-college bound, vocationally oriented, and wanting to enter the labor force immediately upon graduation,*
- 2) *special needs populations who have problems with the traditional learning process,*
- 3) *those students who are interested in advanced training in certificate or apprenticeship programs.*

In the current environment, any student desiring to go on to college will experience limited access to vocational programs and services. These students are limited by the time they have available for vocational education, as they are encouraged to build their schedules around the academic requirements for entrance into a college baccalaureate program. This is one of the toughest issues affecting student access that local vocational practitioners must confront.

Preparing for college does not automatically mean following a pure academic track.

Many regional systems are, however, actively working to expand programs and services for students interested in advanced technical training through certificate, apprenticeship, or two-year associate degree programs. An important part of this process involves articulation between regional systems and the community colleges, or programs to which their students advance. This process usually involves the sequencing of vocational preparation and skill level courses between the secondary and post secondary levels. These articulation efforts should also consider the academic skills necessary for student success. Preparing for college does not automatically mean following a pure academic track. Clarifying the difference between preparing to enter college and preparing to enter a four year baccalaureate degree program is necessary to expand access for students to advanced vocational and technical education.

Where are the students being served?

High school students have traditionally received vocational training in three settings: comprehensive high schools, area vocational centers, and through cooperative work experience at a business or industry. Vocational programs offered by comprehensive high schools typically include both orientation and skill level classes, and serve ninth through twelfth grade students. However, the increasing emphasis on academics, and the rising costs associated with maintaining quality vocational programs have caused many high schools to restrict and/or reduce the number of vocational programs offered to students.

Area vocational centers were established in Illinois to provide high school juniors and seniors skill level preparation in vocational and technical careers. These facilities enjoyed tremendous success during the 1970's and early 1980's. They continue to be valuable for delivering technical training, but several factors are limiting vocational centers in responding to student needs. Declining student populations, increasing competition for students, rapidly changing job patterns, and the constant need to add new technical equipment are factors that hinder the operations of vocational centers.

Cooperative education programs are an important part of vocational education. By creating these partnerships within business and industry, vocational educators can offer students access to state of the art equipment, procedures, and processes. The growing challenge for vocational educators is to create these experiences in business environments that accurately reflect current business practice. Cooperative education is dependent upon communication, evaluation and teamwork between the instructor and the worksite supervisor. Activities between the classroom and the worksite are often difficult to coordinate in ways that develop each student's job skills.

In a few EFE regions, innovative agreements between the system and participating businesses have created new program sites within the private sector.

The second phase of the EFE initiative requires each regional system to implement a local plan that extends student access to a greater variety of vocational experiences. These local plans involve member high schools, area vocational centers, and (through articulation agreements) many community colleges. In a few EFE regions, innovative agreements between the system and participating businesses have created new program sites within the private sector. Such vocational programs are housed inside participating businesses and provide opportunities for interaction among teachers, students, and business personnel. Students gain exposure to technical and interpersonal skills necessary for job success. These developments are providing students with increased access to improved vocational

programming, but EFE system directors must work closely with high school principals, area vocational center directors and others to insure success for such practices.

How are vocational students served?

Within broad occupational areas, vocational programs are separated into both orientation and skill level courses. In the past, orientation level classes introduced general topics, provided students with career information, and focused on individual student project work. As a part of the EFE initiative, new orientation level programs are being developed in five occupational areas. They are designed to introduce a series of occupational systems and processes and help students gain an understanding of how this information relates to a variety of jobs and occupations.

New ways to award students credit should be explored that are based on the skills students learn rather than on the time they spend in a series of courses.

Skill level programs are being revised to reflect over 125 occupations in agriculture, home economics, health, business, and industry and technology. These programs are based on occupational task lists that incorporate basic, attitudinal and technical skills necessary for job success. Each EFE system must organize its vocational programs according to occupations that are identified as emerging in the state and local economy. Each occupation is defined by incumbent workers who verify the critical skills a worker must possess to successfully work in that occupation. This process results in an accurate definition of the critical job skills that a specific vocational program should reflect. Skills are sequenced into a series of courses and each course is assigned a certain level of credit.

This process is improving the quality of vocational education. However, student access will continue to be limited as long as programs are organized into a series of courses that are defined by Carnegie Units of time. New ways to award students credit should be explored that are based on the skills students learn rather than on the time they spend in a series of courses.

Currently, the delivery of vocational programs varies from location to location. There is a trend, especially in area vocational centers, to use a competency-based format, but most programs are still delivered using traditional instructional methods. Students are taught in group settings and occupational information is presented in a topical manner rather than through skill-specific curriculum.

A concluding consideration regarding serving vocational students involves the role of technology in delivering programs and services. In Illinois, several factors are limiting student access to a wide variety of technologies.

The most visible obstacle is a lack of money. Regional EFE systems do not have funds to purchase essential equipment for teaching technical skills. Increased financial support is needed to meet the diverse technical skill requirements of students.

Instructor knowledge of current business practice is another important technology issue. Recently, Illinois has provided vocational educators with the opportunity to work inside business and industry through a program called the Vocational Instruction Practicum (VIP). The program pays educators a stipend to work in a job inside a business or industry. Teachers gain first-hand experience of the technical and interpersonal skills that students must possess for job success. The VIP program serves an important function in updating instructors' technical knowledge of the workplace.

Vocational educators need a better understanding of how to use technology in the instructional process. Currently, very few teachers are using instructional technologies to enhance their teaching skills. They need support in defining how best to incorporate new technology into the instructional process so that more students can be served in ways that address their individual needs.

Why are vocational students served?

Given many of the current debates, this is not an easy question to answer. However, four factors appear to help maintain student participation in vocational education. The first is tradition. Vocational education has been a part of public education in this country for so long that many people are reluctant to suggest that it be eliminated from the secondary educational process.

A second factor involves the investment that many school districts have committed to vocational education in terms of staff, facilities and equipment. For

these schools, vocational education may be expensive to continue and/or revitalize, but to abandon it would be equally difficult in view of their investments.

Vocational programs and services also continue to exist out of necessity. They provide alternative methods of instruction that are very important in reaching special populations and those students who do not fit in traditionally structured classroom situations.

Finally, and most importantly, there is a continuing demand for vocational programs and services from both students and the businesses and industries who hire them. Unfortunately, the training these groups demand is frequently not in line with the programs and services that vocational education offers. In Illinois, the first phase of the EFE initiative represents only one step in a complicated, long-term process to revitalize vocational education and secure its place in public education.

When are students served?

A primary goal of the education for employment initiative is the development of a comprehensive K-14 career education system. It is intended to provide all students (youth and adult) with access to appropriate technical training and career education for emerging careers. The first phase of the EFE initiative has not placed a great emphasis on K-6 career information programs. The number and quality of early career education programs must be improved if the EFE initiative is to achieve its full potential. Younger students and their parents need more information that accurately reflects where employment and occupational opportunities are emerging in the economy.

Traditionally, vocational courses are available to students in the context of the regular school day, but in a few EFE systems, students have received the opportunity to take vocational courses in the evening, on weekends, or during the summer. With the current focus on increasing academic requirements for graduation, vocational opportunities should be expanded to students in these non-traditional timeframes.

What type of vocational programs and services are offered?

Through the education for employment initiative, vocational programs are changing to reflect new career opportunities in service-related industries and emerging technical fields. To accomplish this,

a series of activities has been completed in each regional system. First, a review of labor market information was conducted to identify emerging and sustaining jobs in the state and local economy. This was followed by a verification process in which vocational instructors worked with incumbent workers to verify specific skills necessary for job success in each of the identified occupations. Then vocational instructors compared these verified skills with the current content of vocational programs and identified where they needed to revise and update the curriculum. This process goes beyond a focus on technical skills. It reflects a new emphasis on basic academic and attitudinal skills that will reinforce students' abilities to communicate, think and compute. New curriculum materials should reflect efforts to develop student skills in problem-solving, critical-thinking and decision-making.

It is the intent of the EFE initiative to refocus vocational programs to reflect occupational requirements that include the basic academic, attitudinal and technical skills necessary for student success. If we are going to accomplish this goal, we must continue to expand the commitment of upgrading vocational instructors' knowledge and acceptance of the current and future workplace.

Access and Equity for Special Populations

Over the next twenty years, the number of available American workers will continue to shrink while the number of new jobs available in the economy will continue to grow. As this shift occurs, more older, more female, more minority, more disadvantaged, and more new immigrant workers will enter the labor force (Guiton, 1988). Of those young people who will become replacement workers, an increasing percentage will come from minority and poor families; groups that have had disproportionately high unemployment rates over the last two decades (National Association of State Vocational Directors, 1988).

For members of these populations, the emerging job market should provide tremendous employment opportunities. Vocational education can be an important part in helping these groups to realize that opportunity, but it must be prepared to adjust to their

special learning needs. Some of the demographic projections for Illinois suggests that:

- *more adults and nonwhite minority youth will require vocational training,*
- *a high percentage of the emerging student population will lack the fundamentals skills to seek employment,*
- *an increasing percentage of women will enter the workforce requiring counseling and support to pursue nontraditional careers ("Illinois State Board," 1983).*

A major goal of the EFE initiative is to insure access to vocational education for students in special populations. Each EFE system must develop specific plans for serving special populations. Funding support is provided through the Carl Perkins Vocational Act of 1984 and allows local vocational leaders the flexibility of pooling resources with matching local funds in ways that can best serve the needs of local special populations. In many regions, special needs coordinators have been hired to coordinate activities aimed at improving service to students with special needs. The Illinois State Board of Education is providing local special needs professionals with extensive training and support.

Despite these positive steps, most vocational teachers are still limited in their ability to serve special populations. They lack the experience and/or the skills necessary to work with special populations. In addition, they have limited access to special equipment, curriculum materials and instructional assistance from special education professionals. As the EFE initiative continues, additional support will be needed to allow vocational instructors to meet the needs of special populations.

Barriers that Impact on Student Access to Vocational Education

Much of the preceding discussion has focused on the current state of vocational education. It seems apparent that national, state and local leaders must work together if the goal of improving student access is to be achieved.

In Illinois, the State Board of Education's creation of a policy on education for employment represents

a major attempt to begin a process of systematic change. By focusing on labor market data, defining contemporary occupational tasks, and establishing regional systems, a process for revitalizing vocational education has begun. However, several barriers continue to limit student access. At the local level, certain factors are complicating the efforts of EFE directors who are trying to improve student access to programs and services. In recent conversations with eight EFE system directors representing both urban and rural systems, several common barriers were identified. They included physical and emotional issues that may be organized into five broad categories: political, emotional, financial, physical, and logistical barriers.

Political Barriers

Regardless of its size or location, each regional system seems to have political barriers that limit efforts to improve student access. These include:

- *a desire by local administrators to protect their school's programs and staff,*
- *a prevailing philosophy that emphasizes 'academics' and 'basics' ahead of skill training in both importance and resource priority,*
- *an emphasis for counselors to place students in academic (college bound) tracks. Counselors' professional success is often viewed by the number of students who go on to four-year college baccalaureate programs.*
- *a lack of vocational background among counselors or administrators which limits their roles as instructional leaders with regard to vocational curriculum,*
- *a state report card emphasizing academics and putting a major focus on SAT and ACT scores,*
- *local graduation requirements,*
- *lack of awareness of vocational education by students and their parents,*
- *no major state-wide marketing effort to:*
 - *enhance vocational awareness*
 - *promote technical career opportunities*
 - *promote attitude change regarding vocational education by parents, administrators, and local school board members*

Emotional Barriers

Each of the system directors interviewed suggested that the greatest obstacles to student access are **emotional and perceptual barriers**. As an example, each EFE director identified parents' expectations and aspirations for their children's job success. Despite the accuracy of current labor market information, and despite what occupational forecasts predict, most students, and their parents, expect that a student's career path will follow a pattern that does not match the reality of labor market information. As one system director commented "plumbers and pipefitters don't want their kids to become plumbers or pipefitters. Parents view a college education as the most critical element to employment success."

The business community is also contributing to a complicated emotional debate involving vocational education. When business leaders ask schools to provide graduates with good basic skills, they seldom provide a clear definition of what constitutes a basic skill. When they say they want graduates who can read, write, and compute, do they mean in the cognitive and abstract way, or within the context of a particular business or vocational application? If students possess a cognitive knowledge of fractions, is that sufficient for entry level employment or must they be able to apply that knowledge to a wide range of technical measuring instruments? An increasing number of school officials view basics in terms that do not include skills provided by vocational programs and services.

Financial Barriers

The cost of vocational education is high compared to some areas of education. Local administrators confront barriers in justifying this expense without the benefit of adequate state support. Many superintendents and lay board members resist change and balk at new initiatives because of a dwindling base of financial resources.

Physical Barriers

Lack of physical resources creates barriers to student access in many EFE systems. Adequate facilities and equipment are not always available to provide vocational programming that model current industry and business practice. Emerging vocational and technical programs reflect careers in automated manufacturing, food service, health oc-

cupations, and contemporary business practice. Each program requires expensive facilities and equipment that place a financial burden on EFE systems.

These obstacles have encouraged some EFE regions to look for new approaches. As examples, students of the Northwestern Suburban Career Cooperative are learning state of the art techniques in autobody repair by taking skill level courses offered through the Allstate Insurance Training and Research Center. The Three Rivers Education for Employment System offers electronics training through a cooperative program with Kinetic Systems, and the CEANCI regional system cooperates with Rock Valley Community College's hi-tech center to offer advanced computer-aided drafting.

These are examples of a growing trend to create new public/private partnerships that better utilize existing facilities and minimize needless duplication. However, examples of these types of relationships have been limited.

Logistical Barriers

Both rural and urban EFE regions face logistical barriers that prevent student access to vocational programs and services. Rural schools struggle to transport students between remote training sites in timely and cost effective ways. Urban settings confront traffic congestion that restricts student movement between shared vocational sites.

Attempts have been made to overcome these barriers. The LaMoine Valley Vocational System is currently testing a process that has students staying in their home districts for all lecture related class activities. Students travel one day a week for five hours of concentrated work in skill application at a shared vocational site. This type of approach may resolve some conflicts that occur from transporting students.

Technology and Access to Vocational Programs and Services

Technology can play an important role in increasing student access to vocational programs and services. Technology may offer a form of electronic

busing for EFE systems with rural districts that lack the financial resources and student numbers to justify extensive programs. But if EFE systems are going to maximize technology's usefulness, they must be willing to take a systems approach in defining its use. Hardware and software requirements should be identified that will emphasize diagnostics, performance measures and learner outcomes in order to capitalize on technology's potential in meeting student needs.

Most of the current technology emphasis in Illinois is on instructional media, which is only one part of a much bigger technology picture. Emerging computer technologies are allowing disabled students and other special populations access to a variety of new skills. In the context of the EFE initiative, new information technologies may allow students access to more information, people and resources than is currently perceived as possible.

Emerging instructional technologies provide vocational instructors with the potential to customize learning to meet the needs of individual students, but for many teachers, technology presents a dilemma. How do they decide what they want technology to do? What elements should be emphasized with regard to instruction? Answers to these questions can advance the use of instructional technologies in meeting the needs of students who seek access to vocational programs.

Instructional technologies offer educators exciting potential for helping students achieve greater learning success, but to realize these benefits educational systems must change. The EFE initiative has moved vocational education in the right direction, but it must go further. If we match these recent attempts with similar efforts within business and industry, some interesting comparisons can be made. Competitive market pressures have forced industrial leaders to refocus, reassess and redefine how they do business. In the struggle to compete, new manufacturing designs and processes have been developed. New ways of gathering data, evaluating performance, organizing work, producing products and involving workers in the production process have emerged. In many situations, these new business concepts are resulting in whole new production

systems that are designed to take advantage of current technologies.

Vocational education is also confronting change, but unlike the business community, it has limited its revitalization efforts. The EFE initiative has focused on creating new administrative structures to improve program delivery and on revitalizing program content to reflect emerging occupational skills. But these efforts must be matched by changes in the instructional process. We can not successfully develop technical training programs that provide students with skills for the 21st century by delivering instruction in a 19th century education model.

Summary

Vocational education represents a body of knowledge comparable to math, science, the arts, and English as an educational discipline. It is designed for the educational purpose of providing students with the skills necessary for work, but it also often serves as a method of instruction to introduce and instruct students in many of the basic skills represented in other academic disciplines. For many students, it provides the connectedness necessary for a meaningful relationship between school and a job or career.

As our society continues to change, there is a need to expand this transition in learning to provide students with transferable skills for employment success and life-long-learning. In Illinois, the State Board of Education's policy on education for employment represents a positive first step for helping students achieve this goal. However, there are still many challenges that limit student access to vocational programs and services. A redefinition of vocational education may be needed to overcome many of these. At the local level, EFE system directors face many physical, emotional, and political obstacles that are preventing progress. At the state level, the State Board of Education must establish a policy on technology and education that provides a framework for EFE systems. Such a policy will help local leaders maximize the use of technology to improve efficiency and expand access to vocational programs and services.

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